

## REMARKS

### Claim Rejections - 35 U.S.C. § 103(a)

#### Claims 5-6, 9, 11-14, and 29-30

Claims 5-6, 9, 11-14 and 29-30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,684,527 issued to Terui et al. (*Terui*), in view of U.S. Patent No. 5,884,257 issued to Maekawa et al. (*Maekawa*). For at least the reasons set forth below, Applicant submits that claims 5-6, 9, 11-14 and 29-30 are not rendered obvious by *Terui* in view of *Maekawa*.

Independent claim 5 recites, in part, the following:

a speaker identification subsystem to determine whether a conferee is speaking based, at least in part, on **distinguishing a conferee's lips and lip movements from other image features in a digital video signal** from a conference station at which the conferee is located and determining whether the lip movements are reasonably consistent with an audio signal from the conference station, the subsystem also to determine which of a plurality of conferees is speaking the loudest when multiple conferees are speaking simultaneously from different conference stations.

Independent claims 11, 14, and 30 recite similar limitations.

The Office action cites *Terui* and *Maekawa* as disclosing the limitations of the independent claims. Specifically, *Terui* is cited as disclosing a videoconference system a conference bridge for interconnecting a plurality of videoconference stations to determine whether a conferee is speaking based on voice level and amount of motion. However, the Office action states – and Applicant agrees – that *Terui* does not teach a speaker identification subsystem to determine whether a conferee is speaking based on whether visual lip movements of said conferee are reasonably consistent with an audio signal

from a conference station in which the conferee is located. Further, Applicant submits *Terui* does not teach or disclose **distinguishing a conferee's lips and lip movements from other image features in a digital video signal**.

The Office action cites *Maekawa* as disclosing voice recognition based on a voice signal and a lip movement signal. Claim 5, as amended, recites a speaker identification subsystem to determine whether a conferee is speaking based, at least in part, on **distinguishing a conferee's lips and lip movements from other image features in a digital video signal** from a conference station...and determining whether the lip movements are reasonably consistent with an audio signal from the conference station. In contrast, *Maekawa* teaches that lip movement is determined by radiating light from an LED onto a lip region such that any reflected light is detected by a photodiode. See column 5, lines 42-59.

*Maekawa* does not teach or disclose distinguishing a conferee's lips and lip movements from other image features in a digital video signal. In disclosing that light is radiated directly (and solely) onto a lip region, *Maekawa* never reaches the issue of distinguishing a conferee's lips and lip movements from other image features. Thus, *Maekawa* does not teach this limitation as recited in claim 5.

Furthermore, the Office action cites *Maekawa* (column 12, line 60 – column 13, line 6) as disclosing using a video signal. However, *Maekawa* states that the **movement of the lips is detected by the combination of the LED and the photodiode because of the low cost, as compared with using a video camera**. See column 13, lines 1-5. In other words, *Maekawa* is actually averse to using a video signal. Thus, one of ordinary skill in the art would see *Maekawa* and be steered away from using a video signal to

distinguish lip movements. Thus, Applicant submits that *Maekawa* fails to cure the deficiencies of *Terui*. The combination of *Terui* and *Maekawa* fails to disclose at least one limitation from the independent claims. Therefore, Applicant respectfully submits claims 5, 11, 14, and 30 are not obvious in view of *Terui* and *Maekawa*.

Claims 6, 9 and 29 depend from claim 5. Claims 12 and 13 depend from claim 11. Given that dependent claims necessarily include the limitations of the claims from which they depend, Applicant respectfully submits claims 6, 9, 12-13, and 29 are not rendered obvious by *Terui* and *Maekawa*.

#### Claim 10

Claim 10 was rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,684,527 issued to Terui et al. (*Terui*) in view of U.S. Patent No. 5,884,257 issued to Maekawa et al. (*Maekawa*) and further in view of Japanese Patent No. 06062400A issued to Ogata et al. (*Ogata*). For at least the reasons set forth below, Applicant submits claim 10 is not rendered obvious by *Terui* in view of *Maekawa* and further in view of *Ogata*.

Claim 10 depends from claim 5. As discussed above, *Terui* and *Maekawa* fail to teach or disclose distinguishing a conferee's lips and lip movements from other image features in a digital video signal. *Ogata* was cited as teaching a to display a red rectangular marker in a window display frame to indicate who is a speaker in order to easily specify who is a speaker. Whether or not *Ogata* actually teaches this limitation, *Ogata* does not teach or disclose distinguishing a conferee's lips and lip movements from other image features in a digital video signal. Thus, *Ogata* fails to cure the deficiencies

of *Terui* and *Maekawa*. Therefore, Applicant respectfully submits claim 10 is not obvious in view of *Terui*, *Maekawa*, and *Ogata*.

Conclusion

For at least the foregoing reasons, Applicant submits that the rejections have been overcome. Therefore, claims 5-6, 9-14, and 29-30 are in condition for allowance and such action is earnestly solicited. The Examiner is respectfully requested to contact the undersigned by telephone if such contact would further the examination of the present application.

Please charge any shortages and credit any overcharges to our Deposit Account number 02-2666.

Respectfully submitted,  
**BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN, LLP**

Date: \_\_\_\_\_

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